

## RAW SEQUENCE LISTING

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Application Serial Number: 10/533,104A

Source: PCT/

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PCT

## RAW SEQUENCE LISTING

DATE: 02/21/2006

PATENT APPLICATION: US/10/533,104A

TIME: 12:49:10

Input Set : A:\53466401.APP

Output Set: N:\CRF4\02212006\J533104A.raw

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3 <110> APPLICANT: KWEE, YONG
4     KOSAKA, MASAOKI
5     KOISHIHARA, YASUO
7 <120> TITLE OF INVENTION: HM1.24-UTILIZING CANCER VACCINES
9 <130> FILE REFERENCE: 053466-0401
11 <140> CURRENT APPLICATION NUMBER: 10/533,104A
12 <141> CURRENT FILING DATE: 2005-04-28
14 <150> PRIOR APPLICATION NUMBER: PCT/JP03/13954
15 <151> PRIOR FILING DATE: 2003-10-30
17 <150> PRIOR APPLICATION NUMBER: JP 2002-316639
18 <151> PRIOR FILING DATE: 2002-10-30
20 <160> NUMBER OF SEQ ID NOS: 23
22 <170> SOFTWARE: PatentIn Ver. 3.3
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 109
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
31     comprising leader sequence and HA coding sequence
33 <400> SEQUENCE: 1
34 aattcccacc atgggatgga gctgtatcat cctcttcttg gtagcaacag ctacaggtgt 60
35 ccactcatac ccatacgagc tcccagacta cgctgggtacc gcggccgcg          109
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 109
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
45     comprising leader sequence and HA coding sequence
47 <400> SEQUENCE: 2
48 gatccgcggc cgcggtagca gcgtagtctg ggacgtcgta tgggtatgag tggacacctg 60
49 tagctgttgc taccaagaag aggatgatac agctccatcc catggtggg          109
52 <210> SEQ ID NO: 3
53 <211> LENGTH: 27
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
59     primer
61 <400> SEQUENCE: 3
62 taaaggtacc aacagcgagg cctgccg          27
65 <210> SEQ ID NO: 4

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66 <211> LENGTH: 28
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
72     primer
74 <400> SEQUENCE: 4
75 ctgctgcagt gagatcccag gatccata                28
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79 <211> LENGTH: 396
80 <212> TYPE: DNA
81 <213> ORGANISM: Homo sapiens
83 <220> FEATURE:
84 <221> NAME/KEY: CDS
85 <222> LOCATION: (1)..(396)
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Nucleotide sequence of extracellular domain of
89     soluble HM 1.24 antigenic protein
91 <400> SEQUENCE: 5
92 aac agc gag gcc tgc cgg gac ggc ctt cgg gca gtg atg gag tgt cgc    48
93 Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg
94   1             5             10             15
96 aat gtc acc cat ctc ctg caa caa gag ctg acc gag gcc cag aag ggc    96
97 Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly
98   20             25             30
100 ttt cag gat gtg gag gcc cag gcc gcc acc tgc aac cac act gtg atg   144
101 Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met
102   35             40             45
104 gcc cta atg gct tcc ctg gat gca gag aag gcc caa gga caa aag aaa   192
105 Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys
106   50             55             60
108 gtg gag gag ctt gag gga gag atc act aca tta aac cat aag ctt cag   240
109 Val Glu Glu Leu Glu Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln
110  65             70             75             80
112 gac gcg tct gca gag gtg gag cga ctg aga aga gaa aac cag gtc tta   288
113 Asp Ala Ser Ala Glu Val Glu Arg Leu Arg Arg Glu Asn Gln Val Leu
114   85             90             95
116 agc gtg aga atc gcg gac aag aag tac tac ccc agc tcc cag gac tcc   336
117 Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser
118  100            105            110
120 agc tcc gct gcg gcg ccc cag ctg ctg att gtg ctg ctg ggc ctc agc   384
121 Ser Ser Ala Ala Ala Pro Gln Leu Leu Ile Val Leu Leu Gly Leu Ser
122  115            120            125
124 gct ctg ctg cag                                           396
125 Ala Leu Leu Gln
126   130
129 <210> SEQ ID NO: 6
130 <211> LENGTH: 30
131 <212> TYPE: DNA

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132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
136     primer
138 <400> SEQUENCE: 6
139 ataggatcct caagcggagc tggagtcctg 30
142 <210> SEQ ID NO: 7
143 <211> LENGTH: 345
144 <212> TYPE: DNA
145 <213> ORGANISM: Homo sapiens
147 <220> FEATURE:
148 <221> NAME/KEY: CDS
149 <222> LOCATION: (1)..(345)
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Nucleotide sequence of extracellular domain of
153     C-terminal lacking soluble HM 1.24 antigenic
154     protein
156 <400> SEQUENCE: 7
157 aac agc gag gcc tgc cgg gac ggc ctt cgg gca gtg atg gag tgt cgc 48
158 Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg
159 1 5 10 15
161 aat gtc acc cat ctc ctg caa caa gag ctg acc gag gcc cag aag ggc 96
162 Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly
163 20 25 30
165 ttt cag gat gtg gag gcc cag gcc gcc acc tgc aac cac act gtg atg 144
166 Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met
167 35 40 45
169 gcc cta atg gct tcc ctg gat gca gag aag gcc caa gga caa aag aaa 192
170 Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys
171 50 55 60
173 gtg gag gag ctt gag gga gag atc act aca tta aac cat aag ctt cag 240
174 Val Glu Glu Leu Glu Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln
175 65 70 75 80
177 gac gcg tct gca gag gtg gag cga ctg aga aga gaa aac cag gtc tta 288
178 Asp Ala Ser Ala Glu Val Glu Arg Leu Arg Arg Glu Asn Gln Val Leu
179 85 90 95
181 agc gtg aga atc gcg gac aag aag tac tac ccc agc tcc cag gac tcc 336
182 Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser
183 100 105 110
185 agc tcc gct 345
186 Ser Ser Ala
187 115
190 <210> SEQ ID NO: 8
191 <211> LENGTH: 32
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
197     primer

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199 <400> SEQUENCE: 8
200 ggatcttggt tcattctcaa gcctcagaca gt 32
203 <210> SEQ ID NO: 9
204 <211> LENGTH: 30
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
210 primer
212 <400> SEQUENCE: 9
213 cctcagactc ggcctgaccc gtggaaagaa 30
216 <210> SEQ ID NO: 10
217 <211> LENGTH: 429
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
223 nucleotide sequence coding for a fusion protein
224 comprising HA peptide and soluble HM 1.24
225 antigenic protein
227 <220> FEATURE:
228 <221> NAME/KEY: CDS
229 <222> LOCATION: (1)..(429)
231 <400> SEQUENCE: 10
232 tac cca tac gac gtc cca gac tac gct ggt acc aac agc gag gcc tgc 48
233 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Gly Thr Asn Ser Glu Ala Cys
234 1 5 10 15
236 cgg gac ggc ctt cgg gca gtg atg gag tgt cgc aat gtc acc cat ctc 96
237 Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg Asn Val Thr His Leu
238 20 25 30
240 ctg caa caa gag ctg acc gag gcc cag aag ggc ttt cag gat gtg gag 144
241 Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly Phe Gln Asp Val Glu
242 35 40 45
244 gcc cag gcc gcc acc tgc aac cac act gtg atg gcc cta atg gct tcc 192
245 Ala Gln Ala Ala Thr Cys Asn His Thr Val Met Ala Leu Met Ala Ser
246 50 55 60
248 ctg gat gca gag aag gcc caa gga caa aag aaa gtg gag gag ctt gag 240
249 Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys Val Glu Glu Leu Glu
250 65 70 75 80
252 gga gag atc act aca tta aac cat aag ctt cag gac gcg tct gca gag 288
253 Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln Asp Ala Ser Ala Glu
254 85 90 95
256 gtg gag cga ctg aga aga gaa aac cag gtc tta agc gtg aga atc gcg 336
257 Val Glu Arg Leu Arg Arg Glu Asn Gln Val Leu Ser Val Arg Ile Ala
258 100 105 110
260 gac aag aag tac tac ccc agc tcc cag gac tcc agc tcc gct gcg gcg 384
261 Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser Ser Ala Ala Ala
262 115 120 125
264 ccc cag ctg ctg att gtg ctg ctg ggc ctc agc gct ctg ctg cag 429

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## RAW SEQUENCE LISTING

DATE: 02/21/2006

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TIME: 12:49:11

Input Set : A:\53466401.APP

Output Set: N:\CRF4\02212006\J533104A.raw

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265 Pro Gln Leu Leu Ile Val Leu Leu Gly Leu Ser Ala Leu Leu Gln
266      130                      135                      140
269 <210> SEQ ID NO: 11
270 <211> LENGTH: 378
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
276     nucleotide sequence coding for a fusion protein
277     comprising HA peptide and C-terminal lacking
278     soluble HM 1.24 antigenic protein
280 <220> FEATURE:
281 <221> NAME/KEY: CDS
282 <222> LOCATION: (1)..(378)
284 <400> SEQUENCE: 11
285 tac cca tac gac gtc cca gac tac gct ggt acc aac agc gag gcc tgc      48
286 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Gly Thr Asn Ser Glu Ala Cys
287   1           5           10           15
289 cgg gac ggc ctt cgg gca gtg atg gag tgt cgc aat gtc acc cat ctc      96
290 Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg Asn Val Thr His Leu
291           20           25           30
293 ctg caa caa gag ctg acc gag gcc cag aag ggc ttt cag gat gtg gag      144
294 Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly Phe Gln Asp Val Glu
295           35           40           45
297 gcc cag gcc gcc acc tgc aac cac act gtg atg gcc cta atg gct tcc      192
298 Ala Gln Ala Ala Thr Cys Asn His Thr Val Met Ala Leu Met Ala Ser
299           50           55           60
301 ctg gat gca gag aag gcc caa gga caa aag aaa gtg gag gag ctt gag      240
302 Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys Val Glu Glu Leu Glu
303   65           70           75           80
305 gga gag atc act aca tta aac cat aag ctt cag gac gcg tct gca gag      288
306 Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln Asp Ala Ser Ala Glu
307           85           90           95
309 gtg gag cga ctg aga aga gaa aac cag gtc tta agc gtg aga atc gcg      336
310 Val Glu Arg Leu Arg Arg Glu Asn Gln Val Leu Ser Val Arg Ile Ala
311           100          105          110
313 gac aag aag tac tac ccc agc tcc cag gac tcc agc tcc gct      378
314 Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser Ser Ser Ala
315           115          120          125
318 <210> SEQ ID NO: 12
319 <211> LENGTH: 379
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
325     nucleotide sequence coding for L chain V region
326     version a of humanized anti-HM 1.24 antibody
328 <220> FEATURE:
329 <221> NAME/KEY: CDS

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**VERIFICATION SUMMARY**

DATE: 02/21/2006

PATENT APPLICATION: US/10/533,104A

TIME: 12:49:12

Input Set : A:\53466401.APP

Output Set: N:\CRF4\02212006\J533104A.raw